

## **ABSTRACT**

A composite adsorbent includes a shaped substrate having an adhesive film on a portion of at least one side and an adsorbent that has been immobilized as a layer on the adhesive portion of the substrate. The composite adsorbent is designed to be shaped into a form that provides a high adsorption capacity, low pressure drop, high volume capacity, and fast adsorption kinetics to effectively adsorb odors over an extended period of time. Optionally, the composite adsorbent is also used in combination with an air permeable unit wherein it is advantageously positioned to provide enhanced adsorption of contaminants found in gas phase.